## **RAW SEQUENCE LISTING**

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Application Serial Number: 101

Source:

Date Processed by STIC:

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IFW16

DATE: 01/13/2006 RAW SEQUENCE LISTING TIME: 08:43:34 PATENT APPLICATION: US/10/605,452C

Input Set : A:\Nov05.ST25.txt

Output Set: N:\CRF4\01132006\J605452C.raw

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3 <110> APPLICANT: Kerr, William G.
             Ninos, John M.
      6 <120> TITLE OF INVENTION: Novel SH2containing Inositol 5'-phosphatase Isoform That
Partners
             With The Grb2 Adapter Protein
      9 <130> FILE REFERENCE: USF-211XT
     11 <140> CURRENT APPLICATION NUMBER: 10/605,452C
     12 <141> CURRENT FILING DATE: 2003-09-30
     14 <150> PRIOR APPLICATION NUMBER: 60/319,583
     15 <151> PRIOR FILING DATE: 2002-09-30
     17 <160> NUMBER OF SEQ ID NOS: 18
     19 <170> SOFTWARE: PatentIn version 3.3
     21 <210> SEQ ID NO: 1
     22 <211> LENGTH: 4125
     23 <212> TYPE: PRT
     24 <213> ORGANISM: Mus musculus
     26 <400> SEQUENCE: 1
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     76 Cys Thr Gly Thr Cys Thr Thr Cys Cys Ala Thr Thr Gly Ala Ala Gly
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200 80 Ala Thr Ala Ala Gly Gly Thr Cys Ala Ala Gly Thr Cys Cys Thr Thr

Input Set : A:\Nov05.ST25.txt

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85 2	_	<b>-</b> 1-		1	-1-	230	-1-	2		1	235	2	- 2		-1-	240
		Ala	Ala	Thr	Cvs		Ala	Cvs	Cvs	Ala		Cvs	Ala	Glv	Glv	
89	<b>-</b> _1				245			-1-	-1-	250		-1-		1	255	-1-
	Slv	Thr	Thr	Cys		Cvs	Thr	Thr	Ala		Cvs	Cvs	Cvs	Thr		Cvs
93	3 L y	1111	1111	260	Cyb	Cyb			265		Cyb	CyD	C 7 D	270	C	Cyb
	21 17	Glv	Thr	Cys	Δla	Cvs	Cve	Thr		Thr	Glv	Δla	Glv		Thr	Glv
97	эту	Gry	275	Cys	AIU	Cyb	Cyb	280	1111	1.11	Ory	mru	285	Ory	1	Q <b>.</b> ,
_	ב ו ג	- 14		. ጥክ <i>ተ</i>	Cve	. Ala	G1s		G13	. Thr	- Cvc	. Cv		Thr	Glv	Gly
101	ALU	290	_	1111	Cyc	7110	295		. 01			300		, 1111	013	017
	Gla			Thr	Thr	Cvs			Cvs	. Ala	Gla			Ala	Ala	Thr
	305	_	, ,,,,,			310	_		. 07.	,	315					320
			: Ala	Thr	Cvs			: Ala	a Ala	a Ala			Glv	r Glv	Ala	Cys
109	017	0,1			325					330					335	
	GIV	Thr	Thr	· Glv			Thi	· Cvs	. Thi			, Gls	, Ala	Ala		Cys
113	,			340				1-	345		1	1		350		-2
	Thr	· Glv	, Ala			Glv	Thi	Th:		-	Gly	, Ala	a Ala			Cys
117		· •-1	355		<b>O</b> <sub>1</sub>	, U-1		360					365			-1
		. Ala			Glv	, Ala	Thi			7 Thr	Thr	Cvs			Ala	Gly
121	-7-	370		,	1		375	_	,			380		1		1
	Glv			: Ala	Ala	Glv			CVS	Thr	Ala	Cvs	s Ala	i Glv	Cvs	Cys
	385					390			2		395					400
			. Ala	Ala	Ala			a Ala	a Ala	a Thr			Thr	Glv	Cvs	Ala
129		2			405					410	_	- 2		2	415	
	Glv	Cvs	Thr	Cvs			Thi	Ala	a Ala	a Gly	/ Thr	CVS	Cys	Cys	Ala	Gly
133	1	-1.		420					425	_			•	430		•
	Ala	Ala	a Gly			Thr	Cys	Thi			a Ala	Cys	a Ala	a Ala	Gly	Thr
137			435				-	44(				•	445		-	
	Thr	Glv	/ Glv	Thr	Gly	, Ala	Thi	Thi	Thi	Thi	Gly	, Gly	/ Thi	Gly	Gly	Ala
141		450	_		•		455				-	460		_	Ī	
144	Gly	Ala	Cys	Gly	Gly	, Ala	Gly	/ Ala	a Ala	a Gly	/ Gly	/ Ala	a Gly	/ Ala	Ala	Ala
145	_		-	_	_	470					475		_			480
148	Ala	Thi	Cys	Cys	Thr	Gly	Ala	Gly	/ Gly	, Ala	a Ala	Gly	/ Gly	/ Ala	. Ala	Thr
149					485	;				490	)				495	
152	Ala	Thr	Gly	Thr	Thr	Thr	Thi	Thi	Gly	y Cys	Thi	Gly	/ Ala	a Cys	Thr	Cys
153				500					505	5				510	)	
156	Thr	Ala	a Ala	Gly	Ala	ı Ala	Ala	a Ala	a Gly	/ Ala	a Gly	/ Ala	a Ala	a Gly	Gly	Cys
157			515	<u>;</u>				520	)				525	5		
160	Thr	Thi	Cys	Thr	Gly	Thr	Cys	. Ala	a Ala	a Cys	Thi	Cys	Cys	Thr	Gly	Cys
161		530	)				535	5				540	)			
164	Ala	Gly	Cys	: Ala	Gly	, Ala	Thi	Gly	/ Ala	a Ala	a Gly	/ Ala	a Ala	a Cys	Ala	Ala
165	545	;				550	)				555	5				560
168	Gly	Суз	a Ala	Thr	Thr	Cys	Gly	, Gly	/ Ala	a Gly	Cys	Ala	a Gly	Cys	Cys	Ala
169					565					570					575	
172	Gly	Ala	a Gly	Cys	Cys	Thr	Gly	/ Ala	а Суя	s.Ala	a Thi	Gly	/ Ala	a Thr	Cys	Ala
173				580					585					590		
176	Cys	Суя	: Ala	Thr	Cys	Thr	Thi	Cys	s Ala	a Thi	Thi	: Gl			Ala	Cys
177			595	5				600	)				605	5		

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180 181	Thr	Thr 610	Gly	Gly	Ala	Ala	Cys 615	Ala	Thr	Gly	Gly	Gly 620	Thr	Ala	Ala	Thr
	<b>61</b>		777	0,,0	Crea	Circ	Cys	Crea	The	Crea	Cric		ת דת	712	Clar	λla
	_	Cys	Ala	Cys	Cys		Cys	Cys	TIIL	Cys		Cys	ATG	AIG	Gry	
	625		_	_		630			_		635					640
188	Ala	Gly	Ala	Thr	Cys	Ala	Cys	Gly	Thr	Cys	Cys	Thr	Gly	Gly	Thr	Thr
189					645					650					655	
192	Thr	Cvs	Thr	Cvs	Thr	Cys	Cys	Ala	Ala	Gly	Gly	Gly	Gly	Cys	Ala	Gly
193		-		660		•	•		665	-	_	-	-	670		-
	Clv	Clv	λla		Δla	Gly	Ala	Cve		Cve	Glv	Glv	Glv		Cvs	Glv
	Gry	Gry	675	nια	niu	Cry	7114	680	niu	Cys	O <sub>1</sub>	O <sub>T</sub>	685	1114	CyD	017
197		<b>~</b>		<b></b>	mla sa	<b>01</b>	<b>C</b>		<b>G</b> 1	77-	C	mh		<b>~</b>	77.	The
	Ala	_	1111	Cys	IIIL	GIY	Cys	TIII	GIY	Ala	Cys		Ala	Cys	AIA	TIIL
201		690				_	695			_		700				
204	Cys	Cys	Cys	Cys	Cys	Ala	Thr	Gly	Ala	Cys	Ala	Thr	Cys	Thr	Ala	
205	705					710					715					720
208	Gly	Thr	Gly	Ala	Thr	Thr	Gly	Gly	Cys	Ala	Cys	Cys	Cys	Ala	Gly	Gly
209					725					730					735	
212	Ala	Glv	Gly	Ala	Thr	Cys	Cys	Cys	Cys	Thr	Thr	Gly	Gly	Ala	Gly	Ala
213		-	_	740		-	•	•	745			-	-	750	-	
	Glv	Δla	Δla		Glv	Ala	Gly	Thr		Glv	Cvs	Thr	Glv	Glv	Ala	Glv
217	017		755	0-1	<b>U</b> -1		0-7	760	O-1	0-1	0,70		765	<b></b> 1		1
	Crrc	Thr		Carc	Thr	Cvc	Ala		Glaz	Care	Δla	Care		Cvc	Cve	Cve
	Cys		AIA	Cys	1111	Cys		Gry	Gry	Cys	AIA	780	1111	Cys	Cys	Cys
221	1	770	_			<b>~</b> 3	775		<b>~</b> 3	m1			0	<b>a</b>	27-	<b>a</b> 1
		GIY	Cys	Ата	Ala		Ala	Ата	GIY	Thr		Ата	Cys	Cys	Ala	
	785					790					795	_	_	_		800
228	Cys	Ala	Thr	Gly	Ala	Cys	Ala	Thr	Thr	Thr	Ala	Ala	Ala	Ala	Cys	Ala
229					805					810					815	
232	Gly	Thr	Thr	Gly	Cys	Cys	Ala	Thr	Cys	Cys	Ala	Cys	Ala	Cys	Cys	Cys
233				820					825					830		
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237		_	835		_			840					845			
240	Ala	Glv	Thr	Glv	Gly	Thr	Gly	Cys	Thr	Thr	Gly	Cys	Cys	Ala	Ala	Gly
241		850		2	2		855	- 2			- 4	860	-			•
	Cvs		Δla	Glv	Δla	Glv	Cys	Δla	Thr	Glv	Ala	Glv	Ala	Ala	Thr	Cvs
	865	Cyb	1114	017		870	C <sub>I</sub> C			<b>0</b> -1	875	0-1				880
		<b>C1</b>	7 J -	mb ~	C		Gly	Crra	Crrc	777		ח ד ת	Thr	Carc	Thr	
	GIY	GIY	Ala	1111	_	AIA	GIY	Cys	Cys		1111	Ата	1111	Cys	895	Gly
249	_		_		885		~			890	~3	<b></b> 1	<b>~</b> 1			<b>G1</b>
	Cys	Ala	Cys		GIY	Ala	Cys	Ala		Cys	GLY	Thr	GIĀ		Ala	GIY
253				900					905					910		
256	Ala	Cys	Ala	Gly	Gly	Cys	Ala	Thr	Cys	Gly	Cys	Cys		Ala	Cys	Ala
257			915					920					925			
260	Cys	Cys	Cys	Thr	Gly	Gly	Gly	Ala	Ala	Ala	Cys	Ala	Ala	Gly	Gly	Gly
261	_	930	_		_	_	935					940				
	Ala	Glv	Cvs	Ala	Glv	Thr	Gly	Glv	Glv	Ala	Glv	Thr	Glv	Thr	Cvs	Cvs
	945	1	-1-2		1	950	1	1	1		955		4		4	960
		Thr	Care	Δls	Thr		Thr	Thr	Cve	د 1 ∆	-	Thr	Glv	Glv	Δla	
	1111	T 1 # T	Cys	AIG		O I Y	****	****	Cys	970		****	O T y	- Y	975	
269	<b>a</b>	<b>a</b>	m1	<b>O</b>	965	m1	m\	<b>G3</b> -	<b>43</b>		<b>01</b>	ml	m1	C		mb
	cys	cys	Inr		cys	ınr	Thr	GIĀ		GTÅ	GIĀ	inr	rnr		GTÅ	TIIL
273	_			980			_	_	985				, <b>-</b>	990		
276	Cys	Ala	Ala	Cys	Ala	Gly	Cys	Cys	Ala	a Cy	s Th	r Thi	r Gl	y A.	ıa Cy	ys Thr

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277			995				1 (	000			1005					
				Glv	Glaz	λla	Ala		Cve	Glv	Δla			בומ	Δla	
281		1010		GIY	GIY	AIA	1015	Gry	Cys	Gry	ліа	1020	AIG	AIG	AIG	
				Cvs	Thr	Cvs	Ala	Glv	Glv	Δla	Glv		Δla	Δla	Thr	
285	niu	1025		<b>C</b>		C <sub>1</sub> C	1030	<b>U</b> -1	<b>0</b> -1			1035				
	Cve		Δla	Δla	Δla	Cvs		Δla	Thr	Δla	Thr	Gly	Δla	Δla	Cvs	
289	СуБ	1040	nia	AIU	ALU	Cys	1045	niu		2114	****	1050	1114		Cyb	
	λla		Cve	Cve	Thr	G1v	Cys	Glv	Glv	ጥኮዮ	Thr		Cys	Thr	Glv	
293	Ата	1055	Cys	Cys	1111	GLY	1060	Ory	Ory	1111	1111	1065	Cys		Ory	
	Gl <sub>37</sub>		Cve	Cve	Thr	Glv	Gly	Glv	Δla	Glv	Δla		Δla	Ala	Glv	
297	Gry	1070	Cys	Cys	1111	Ory	1075	OLY	niu	O <sub>1</sub>	mru	1080	1114		O <sub>L</sub>	
	Ala		Glv	Cvs	Thr	Δla	Ala	Glv	Cvs	Cvs	Cvs		Thr	Thr	Thr	
301	AIG	1085	Gry	Cys	1111	hiu	1090	OLY	Cyb	Cyb	Cyb	1095	****			
	Δla		Cve	Δla	Thr	Cvs	Ala	Cvs	Cvs	Cvs	Δla		Cvs	Glv	Cvs	
305	niu	1100	Cys	niu	****	Cys	1105	<b>C J D</b>	Cyb	Cyb		1110	C <sub>1</sub> D	<b>U</b> _1	0,0	
	Thr		Cvs	Δla	Cvc	Cvs	Cys	Δla	Cvs	Cvs	Thr		Thr	Thr	Cvs	
309	1111	1115	Cys	niu	Cys	Cys	1120	111 U	Cys	Cyb		1125			0,0	
	Thr		Glv	Cvs	Thr	Thr	Gly	Glv	Glv	Glv	Ala		Cvs	Thr	Cvs	
313	1111	1130	Ory	Cys	1111	1111	1135	Ory	O <sub>T</sub> y	017		1140	Cyb		<b>C</b>	
	Δla		Cvs	Thr	Δla	Cvs	Cys	Glv	Cvs	Glv	Thr		Glv	Ala	Glv	
317	niu	1145	Cyb			Cyb	1150	017	O <sub>J</sub> D	017		1155	0_1		0-1	
	Cvs		Glv	Cvs	Cvs	Cvs	Ala	Cvs	Thr	Thr	Glv		Glv	Ala	Glv	
321	0,0	1160	017	0,0	0,0	O <sub>I</sub> D	1165	<i>-</i> 2 <i>-</i> 2			1	1170	2		2	
	Glv		Δla	Glv	Ala	Glv	Gly	Cvs	Cvs	Ala	Thr		Ala	Thr	Cvs	
325	<b>-</b> 1	1175		<b>4</b> -1		0-1	1180	0,70	012			1185			-1-	
	Cvs		Glv	Ala	Δla	Glv	Ala	Thr	Cvs	Ala	Ala		Cvs	Ala	Ala	
329	0,10	1190	<b>U</b> -1			1	1195		-1-			1200	-2			
	Cvs		Glv	Cvs	Ala	Glv	Thr	Ala	Thr	Thr	Cvs		Glv	Ala	Cvs	
333	-7-	1205	1	-1-		1	1210				- 2 -	1215	•		-	
	Cvs		Thr	Cvs	Thr	Glv	Gly	Cvs	Cvs	Cvs	Ala	Cvs	Glv	Ala	Cvs	
337	-1	1220		- 2		4	1225	- 2	4	-		1230	•		•	
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341	_	1235		4		•	1240		•	•		1245	•		-	
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345		1250	-			-	1255		-	_		1260				
348	Gly	Thr	Cys	Thr	Thr	Cys	Cys	Thr	Gly	Cys	Ala	Cys	Thr	Thr	Thr	
349	_	1265	_			_	1270					1275				
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356	Ala	Cys	Cys	Thr	Thr	Cys	Gly	Cys	Cys	Cys	Cys	Cys	Ala	Cys	Cys	
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376 377	Ala	Thr 1370	Gly	Ala	Ala	Gly	Thr 1375	Ala	Cys	Ala	Ala	Cys 1380	Thr	Thr	Gly
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	Cys		Ala	Gly	Thr	Cys	Cys 1405	Thr	Cys	Thr	Gly	Gly 1410	Ala	Ala	Gly
	Thr		Thr	Thr	Ala	Cys	Cys 1420	Cys	Gly	Cys	Thr	Gly 1425	Gly	Thr	Gly
	Cys		Thr	Gly	Thr	Gly	Gly 1435	Thr	Cys	Thr	Gly	Thr 1440	Cys	Ala	Gly
			Cys	Thr	Ala	Thr	Gly 1450	Gly	Cys	Ala	Gly		Ala	Cys	Cys
			Thr	Gly	Ala	Cys	Ala 1465	Thr	Cys	Ala	Thr		Ala	Cys	Gly
			Thr	Gly	Ala	Cys	Cys 1480	Ala	Cys	Ala	Gly		Cys	Cys	Thr
	Gly		Cys	Thr	Thr	Thr	Gly 1495	Cys	Cys	Ala	Cys		Thr	Thr	Thr
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	Thr	Cys 1520	Thr	Cys	Ala	Ala	Thr 1525	Thr	Cys	Gly	Thr	Cys 1530	Thr	Cys	Cys
	Ala		Gly	Ala	Ala	Thr	Gly 1540	Gly	Thr	Cys	Cys		Gly	Gly	Cys
	Ala		Thr	Gly	Thr	Ala	Gly 1555	Ala	Thr	Ala	Gly		Cys	Ala	Ala
	-		Gly	Cys	Ala	Gly	Ala 1570	Thr	Cys	Gly	Ala		Thr	Thr	Thr
	Cys		Thr	Gly	Cys	Ala	Thr 1585	Gly	Cys	Thr	Ala		Gly	Cys	Cys
436			Ala	Cys	Thr	Gly	Ala 1600	Ala	Gly	Ala	Cys		Ala	Ala	Gly
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	Thr		Cys	Thr	Thr	Gly	Gly 1630	Ala	Gly	Thr	Thr		Cys	Ala	Cys
	Thr		Ala	Ala	Gly	Cys	Thr 1645	Gly	Cys	Thr	Thr	Ala 1650	Gly	Ala	Gly
452				Thr			Gly 1660		_					Gly	Thr
	Cys			Gly			Gly 1675							Ala	Thr
			Ala	Gly	Ala	Gly	Gly 1690	Gly	Ala	Ala	Gly		Gly	Ala	Ala
	Gly	Gly 1700	Ala	Gly	Ala	Gly		Thr	Gly	Gly	Thr	Gly 1710	Gly	Thr	Ala
468	Cys		Gly	Thr	Thr	Thr	Gly 1720	Gly	Ala	Gly	Ala		Ala	Cys	Thr
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VERIFICATION SUMMARY

DATE: 01/13/2006

PATENT APPLICATION: US/10/605,452C

TIME: 08:43:35

Input Set : A:\Nov05.ST25.txt